Claims:

1. A method for controlling a motorized mechanism in the event of external power loss, the motorized mechanism comprising first and second motors coupled to a common driving circuit, said first motor being arranged to rotate at a substantially constant rate with external electrical power applied to the driving circuit, wherein in the event of loss of said external electrical power to the driving circuit, the driving circuit is controlled so as to connect and disconnect the first and second motors to the driving circuit in substantially out-of-phase synchronism to enable said second motor to be driven with electrical power derived from back-emf of the rotating first motor.

2. A method as claimed in claim 1, wherein the motorized mechanism comprises a driving mechanism for a disk drive or the like, wherein the first motor is a spindle motor and the second motor is a read/write head positioning motor.

3. In a disk drive having a spindle motor for rotating a data storage disk and a head positioning motor for positioning a read/write head, the spindle motor and positioning motor being coupled to be driven from an external power source by way of a driving circuit, a method for controlling the motors in the event of loss of said external power source during rotation of the spindle motor wherein the spindle motor and positioning motor are switched on and off from the driving circuit substantially in out-of-phase synchronism to enable said positioning motor to be driven with electrical power derived from back-emf of the rotating spindle motor.

4. A method as claimed in claim 3, wherein the spindle motor is coupled to the upper and lower supply rails of the driving circuit by way of a plurality of respective upper and lower semiconductor switching elements having parallel diode elements, and wherein switching on of the spindle motor corresponds to switching of the lower switching elements to connect the spindle motor to the lower supply rail, and switching off of the spindle motor

allows back-emf derived from the spindle motor to generate a recirculating current through the upper switching elements to the upper supply rail.

5. A method as claimed in claim 4, wherein the positioning motor is coupled to the upper and lower supply rails of the driving circuit by pairs of upper and lower semiconductor switching elements, and wherein switching on of the positioning motor corresponds to switching on a selected one of the pairs of switching elements to connect the positioning motor to the upper and lower supply rails to drive the positioning motor with said recirculating current.

6. A method for controlling a disk drive having a spindle motor and a positioning motor both coupled to a driving circuit, comprising the steps of:

detecting a loss of supply power to the driving circuit;

chopping connection between the spindle motor and the driving circuit to generate an intermittent back-emf derived recirculation current; and

chopping connection between the positioning motor and driving circuit at least substantially synchronized out-of-phase with the chopping of the spindle motor connection to enable driving of the positioning motor using the recirculation current.

7. A disk drive or the like having a spindle motor for rotatably driving a spindle and/or disk, a positioning motor for positioning a read and/or write head, and a motor driving circuit coupled to controllably drive the spindle motor and positioning motor under normal operation using an external power supply, the motor driving circuit including a controller adapted to respond to loss of said external power supply by chopping connection between the driving circuit and the spindle and positioning motors respectfully in a substantially synchronised out-of-phase manner to enable driving of the positioning motor with a recirculation current derived from a back-emf of the spindle motor.

8. A disk drive or the like as claimed in claim 7, wherein the driving circuit has upper and lower supply rails coupled to receive the external power supply under normal operation,

and wherein the driving circuit includes a storage capacitor and a voltage clamp coupled to the upper supply rail.

9. A disk drive or the like as claimed in claim 8, wherein the spindle motor is coupled to the upper and lower supply rails of the driving circuit by way of a plurality of respective upper and lower semiconductor switching elements having parallel diode elements, and wherein chopping of the spindle motor corresponds to alternately switching on and off the lower switching elements to connect the spindle motor to the lower supply rail, wherein switching off the lower switching elements allows back-emf derived from the spindle motor to generate a recirculation current through the upper switching elements to the upper supply rail.

10. A disk drive or the like as claimed in claim 8 or 9, wherein the positioning motor is coupled to the upper and lower supply rails of the driving circuit by pairs of upper and lower semiconductor switching elements, and wherein chopping of the positioning motor corresponds to switching on and off a selected one of the pairs of switching elements to connect and disconnect the positioning motor to the upper and lower supply rails to selectively drive the positioning motor with said recirculating current.